

## Myeloperoxidase Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14319C

### Specification

# Myeloperoxidase Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>P05164</u> <u>NP\_000241.1</u> Human Rabbit Polyclonal Rabbit IgG 83869 420-448

## Myeloperoxidase Antibody (Center) - Additional Information

### Gene ID 4353

**Other Names** Myeloperoxidase, MPO, Myeloperoxidase, 89 kDa myeloperoxidase, 84 kDa myeloperoxidase, Myeloperoxidase light chain, Myeloperoxidase heavy chain, MPO

#### Target/Specificity

This Myeloperoxidase antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 420-448 amino acids from the Central region of human Myeloperoxidase.

**Dilution** IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Myeloperoxidase Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### Myeloperoxidase Antibody (Center) - Protein Information



## Name MPO (<u>HGNC:7218</u>)

**Function** Part of the host defense system of polymorphonuclear leukocytes. It is responsible for microbicidal activity against a wide range of organisms. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates that greatly enhance PMN microbicidal activity (PubMed:<u>9922160</u>). Mediates the proteolytic cleavage of alpha-1-microglobulin to form t-alpha-1-microglobulin, which potently inhibits oxidation of low-density lipoprotein particles and limits vascular damage (PubMed:<u>25698971</u>).

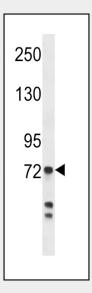
Cellular Location Lysosome.

## Myeloperoxidase Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Myeloperoxidase Antibody (Center) - Images



Myeloperoxidase Antibody (Center) (Cat. #AP14319c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the Myeloperoxidase antibody detected the Myeloperoxidase protein (arrow).





Myeloperoxidase Antibody (Center) (Cat. #AP14319c)immunohistochemistry analysis in formalin fixed and paraffin embedded human colon tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Myeloperoxidase Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

# Myeloperoxidase Antibody (Center) - Background

Myeloperoxidase (MPO) is a heme protein synthesized during myeloid differentiation that constitutes the major component of neutrophil azurophilic granules. Produced as a single chain precursor, myeloperoxidase is subsequently cleaved into a light and heavy chain. The mature myeloperoxidase is a tetramer composed of 2 light chains and 2 heavy chains. This enzyme produces hypohalous acids central to the microbicidal activity of netrophils. [provided by RefSeq].

### **Myeloperoxidase Antibody (Center) - References**

Banerjee, M., et al. Toxicol. Appl. Pharmacol. 249(1):47-54(2010) Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Nahon, P., et al. Antioxid. Redox Signal. (2010) In press : Wang, Y., et al. J. Huazhong Univ. Sci. Technol. Med. Sci. 30(4):437-442(2010) Hua, F., et al. Zhongguo Fei Ai Za Zhi 13(2):122-127(2010)